



Open access publication models for Informatics Risks, Challenges and Opportunities

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Open Access (OA) Task Force

Session led by the Task Force on Open Access

- initiative of Informatics Europe in the frame of the Working Group on Open Science initiated in May 2022
- composed of academic researchers concerned about the impact of the ongoing transition to OA-based models



Alfonso Pierantonio – University of L'Aquila, Italy
Task Force chair, already coordinator of the Italian Grin OA initiative



Antonio Vallecillo – University of Malaga, Spain
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**TASK FORCE ON
OPEN ACCESS**

Why a task force on
open access?

Task force motivations

Some Open Access publication models induce profound changes impacting researchers and their institutions

Need to understand issues and opportunities, in general, and *for our discipline in particular*

Task force objectives

- Increase **awareness** of issues and opportunities
- Analyze **impact** on researchers and institutions, in particular of APC (article processing charges)
- Analyze the rapidly evolving **international context**

Support initiatives to increase competition, quality, and innovation (e.g. **community-led editorial initiatives**)

Relationships with publishers

Publishers play a crucial role: we aim to establish an open and transparent dialogue to

- **mitigate** the **difficulties** related to the OA golden route
- define a shared quality model for OA editorial initiatives, **protecting** the community **from predatory practices**

Background

Basic publishing needs

Infrastructure

- Time stamp (“I did it first”)
- Long term archival, unique identification, integrity
- **Broad and fast dissemination of results**

Quality (for research, and for careers)

- *Internal*: review, editorial committee, typesetting
- *External*: filtering (reduce title inflation and plagiarism)

Pre Internet Era

Infrastructure

Identification, timestamp, fast dissemination, integrity, archival: all satisfied by **distribution in libraries of printed copies** of books, journals, conference proceedings;

“Reader pays” is the standard, costs assumed by libraries

Side-effects

+ publisher *ensure quality* to get library subscriptions

- authors *transfer exclusive rights* to publishers

Internet disruption of the status quo

Massive reduction of *dissemination cost and time*

Access to publications *bypasses libraries*

Subscription economic model is endangered

... leads to disruption of service to research ...

« Embargos » on online distribution → **delayed access**

Digital transition → consolidation → oligopolies → **raising subscription costs**

... leads to the Open Access reaction ...

Open Access: pearls, perils and pitfalls

Open Access



*open and instant access without costs **for the reader** to research results and data*

Part of the broader **Open Science** movement

“Unhindered dissemination of results, methods and products from scientific research [drawing] on the opportunity provided by recent digital progress to develop open access to publications and – as much as possible – data, source code and research methods.” (French National Plan for Open Science)

Overall objectives include:

- *“Increase scientific quality, pace of discovery and technological development, as well as societal trust in science” (Jean-Eric Paquet, EU DGRI)*
- Giving back to the taxpayer the results funded on public money (*White House Memorandum, 25/8/2022*)
- Making the research process more transparent to the taxpayer and to assessment processes

Important side effect: authors *retain the copyright* in their articles

Open Access is not « for free »

Besides work done pro-bono, costs are covered by either

- **Authors:** Article Processing Charge (APC)
hybrid and gold route
- **Community:** non-profit organizations, academic or governmental institutions
platinum/diamond route, mutualized models
- **Institutions:** overlay platforms, repositories
platinum/diamond, green route, mutualized models

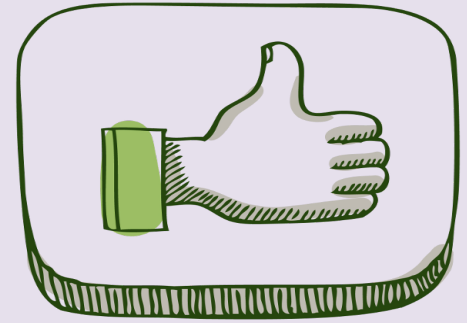
Open Access around the world

A wide range of initiatives and approaches

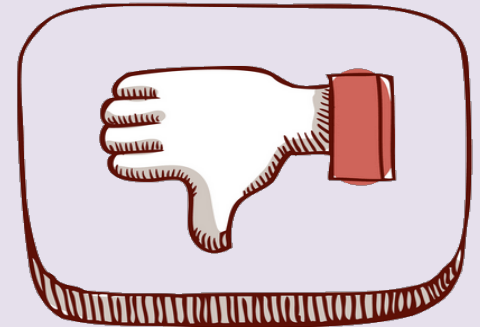
- **Europe:** Plan S, initiated by funding agencies, pushes for « transformative agreements », *focused on APC*
- **USA:** White House memorandum of August 2022 pushes for “zero embargo” open access to publications and data, *no explicit mention of APC*
- **Latin America:** publishing owned and controlled by academic consortia (e.g. Redalyc), *no APC*, mutualised infrastructures

Is “authors pay” (APC) a good idea?

Letting readers openly access publications and research products is a great idea!



However, shifting the costs from the readers to the authors does not look an equally great idea!



Infrastructure economic models

Accumulative (Charge “per use” fees, like APC)

- Economies of scale **accumulate**
- Incentive to maximize « quantity » over « quality »

Mutualised (Divide cost among stakeholders, *not just users*)

- Economies of scale **redistributed**
- Incentive to provide efficient service to stakeholders

APC dangerous for funders

INTERVIEW

Publications scientifiques : le modèle des APC est potentiellement "un vrai danger" (Sylvie Rousset, DDOR du CNRS)

Le modèle des APC prend de l'ampleur et s'il venait à s'imposer il représenterait "un vrai danger" tant au niveau financier que pour la qualité des articles publiés, analyse Sylvie Rousset, directrice de la DDOR du CNRS ⁽¹⁾, interrogée par AEF info en octobre 2022. Selon

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🕒 6 MIN DE LECTURE

Par [CYRIL DUCHAMP](#)

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APC

article processing charge, financement par l'auteur

SCIENTIFIQUE, PRATIQUES
DES SCIENTIFIQUES
ET COÛTS ASSOCIÉS

DDOR

DIRECTION DES DONNÉES OUVERTES DE LA RECHERCHE

APC dangerous for researchers

Explosive combination of two factors:

- numerical indicators (h-index, impact factor) used for funding and career evaluation (but see DORA, COARA, and the DFG CV)
- APCs create a space for predatory journals that allow to « purchase » publications

APC dangerous for researchers

Introduction of a disruptive **financial bias**

- Publisher incentive to *increase* # accepted papers
- *Barrier to publication* for underfunded authors

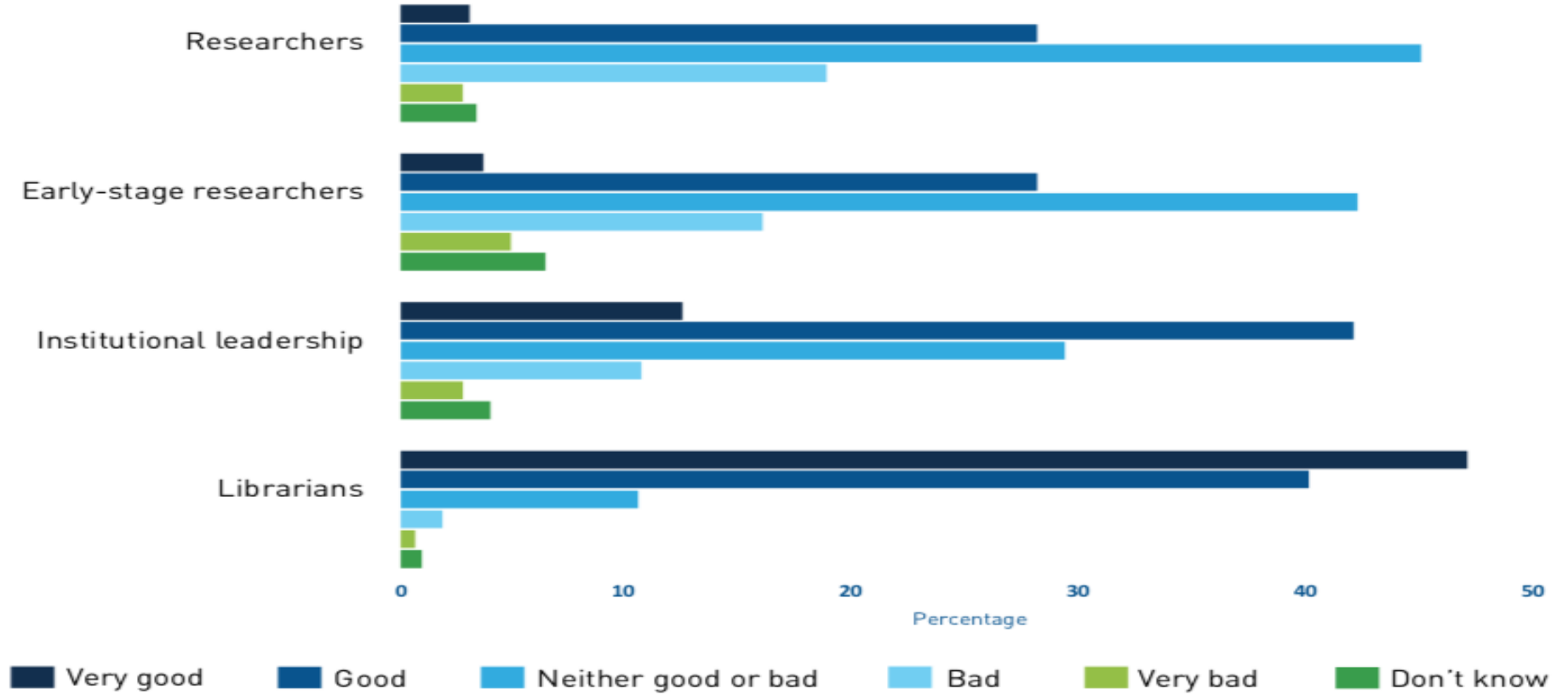
Strong risk of inducing unethical practices

- Publisher practices that erode quality (MDPI debate in Spain)
- Coauthors invited because they can afford APCs, or their institution has an agreement

See the discussion on conference quality

Awareness about OA policies is not good

Figure 12. Awareness of scientific publishers' open access policies among different university populations



What can we do?

Supporting community-driven initiatives that adopt diamond Open Access: many such journals despite limited or no financial resources are of high quality

- Give them visibility and recognition
- Technical platform and support for editors, conforming to the standards (not re-inventing the wheel)

What we can do?

Defining and agreeing a quality model taking into account intrinsic aspects of the editorial process

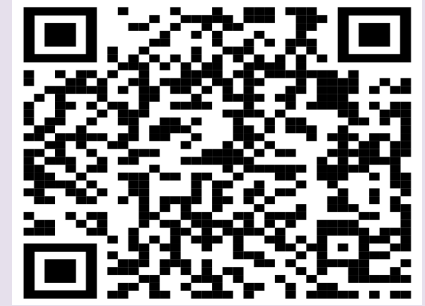
- Reviewers must be granted a *reasonable amount of time* to review a paper
 - there are journals asking one week to return a review
- Editors must be assigned a *manageable number* of manuscripts to supervise
 - there are journals assigning up to 120 manuscripts per year to members of the editorial board

Existing Initiatives

Italian GRIN has defined a shared position representing the Italian CS Community

- Panel on OA

A. Pierantonio, R. Di Cosmo, S. Bistarelli



(in Italian)

Cooperation between GRIN and the Spanish SCIE has been established to identify shared issues, and define common objectives and actions

Call for action

This *is not* a subject for publishers and funders alone!

- get involved in the task force
- connect with national initiatives
- help raise awareness

Thanks